

REMARKS

Claims 1-20 are pending in the present application. Claims 21-22 were previously canceled. Claims 1, 5, 9, 13, 14 and 16 have been amended. Support for these amendments is found at pages 4 and 5 of the original Specification. No new matter has been added.

Claims 1-20 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication No. 2005/0127524 A1 to Sakamoto, *et al.* (hereinafter “Sakamoto”), in view of U.S. Patent No. 6,348,365 B1 to Moore, *et al.* (hereinafter “Moore”) and U.S. Patent No. 5,761,115 to Kozicki, *et al.* (hereinafter “Kozicki”). Applicant respectfully traverses this rejection.

Independent claims 1, 13, 14 and 16 have been amended to clarify features such as generation of the metal ions and the metal precipitates within the solid electrolyte in the operation of the redox reaction. In particular, claim 1, as amended, requires a redox-reaction resulting in an oxidization of the electrode metal and thereby the generation of metal ions which are released into the solid state electrolyte and therein reduced to form metallic precipitates which upon continued supply of metal ions increase a metal concentration within the solid state electrolyte and finally form a conductive metallic connection bridging the electrodes to define the on-state.

The independent claims have been further amended to clarify the conditions required for achieving the irreversible on-state of the switching device. For example, claim 1 requires, that

the metallic connection is irreversible, and one or more of the following conditions are met:

the turn-on voltage is unipolar,
the electrodes are reactive metal electrodes, and
only one electrode is a reactive metal electrode and the other
electrode is an inert metal electrode in a combination with an adjacent metal
layer.

The proposed combination of Sakamoto, Moore and Kozicki does not teach or
suggest these features. Accordingly, the pending independent claims are allowable over
the proposed combination under 35 U.S.C. § 103(a) and should be passed to issue.

Claims 2-12 and 15 depend from claims 1 and 14, respectively, and add further
limitations. It is respectfully submitted that these dependent claims are allowable by
reason of depending from an allowable claim as well as for adding new limitations.

In view of the above, Applicant respectfully submits that this response complies with 37 C.F.R. § 1.116. Applicant further submits that the claims are in condition for allowance. No new matter has been added by this amendment. If the Examiner should have any questions, please contact Applicant's attorney at the number listed below. No fee is believed due in connection with this filing. However, in the event that there are any fees due, please charge the same, or credit any overpayment, to Deposit Account No. 50-1065.

Respectfully submitted,

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Date

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